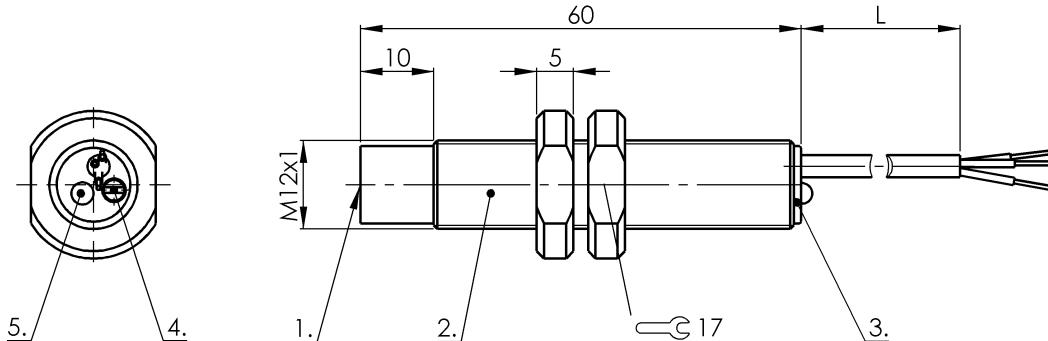


Capacitive Sensors

BCS M12TTI1-POM60G-EP02

Order Code: BCS00EF

BALLUFF

1) Sensing surface, 2) Housing, 3) Cover, 4) Potentiometer, 5) LED function indicator



Basic features

| | |
|---------------------|--|
| Approval/Conformity | CE UKCA cULus WEEE |
| Basic standard | IEC 60947-5-2 |
| Scope of delivery | Nut (2x) Screwdriver Short guide |
| Sensitivity | Switching distance adjustable |

Series M12

Display/Operation

| | |
|--------------------|-----|
| Function indicator | yes |
|--------------------|-----|

Electrical connection

| | |
|-----------------------------------|----------------------|
| Cable diameter D | 3.0 mm |
| Cable length L | 2 m |
| Conductor cross-section | 0.24 mm ² |
| Number of conductors | 3 |
| Polarity reversal protected | yes |
| Protection against device mix-ups | yes |
| Short-circuit protection | yes |

Electrical data

| | |
|---|-------------|
| No-load current I ₀ max. at U _e | 15 mA |
| Operating voltage U _b | 12...35 VDC |
| Rated insulation voltage U _i | 75 V DC |
| Rated operating current I _e | 200 mA |
| Rated operating voltage U _e DC | 24 V |
| Ripple max. (% of U _e) | 10 % |
| Switching frequency | 25 Hz |
| Utilization category | DC-13 |
| Voltage drop static max. | 0.8 V |

Environmental conditions

| | |
|---------------------|-------------|
| Ambient temperature | -30...60 °C |
| Contamination scale | 1 |
| IP rating | IP65 |

Functional safety

| | |
|--------------|-------|
| MTTF (40 °C) | 595 a |
|--------------|-------|

Interface

| | |
|------------------|--------------------------|
| Switching output | PNP normally closed (NC) |
|------------------|--------------------------|

Material

| | |
|--------------------------|------|
| Cover material | POM |
| Housing material | PTFE |
| Material jacket | PUR |
| Material sensing surface | PTFE |

Mechanical data

| | |
|-------------------|--------------|
| Dimension | Ø 12 x 60 mm |
| Installation | non-flush |
| Size | M12x1 |
| Thread (A) | M12x1 |
| Tightening torque | 0.5 Nm |

Range/Distance

| | |
|----------------------------------|-------------------|
| Hysteresis H max. (% of Sr) | 15.0 % |
| Measuring range | 1...6 mm |
| Rated operating distance Sn | 6 mm |
| Repeat accuracy max. (% of Sr) | 2.0 % |
| Temperature drift max. (% of Sr) | 15 % [-5...55 °C] |

Remarks

The potentiometer does not have a fixed stop, but can be turned endlessly without destroying anything.

If no change in the switching signal is detected, the potentiometer should be turned forwards or backwards until a signal change occurs at the output.

For more information about MTTF and B10d see MTTF / B10d Certificate

Indication of the MTTF- / B10d value does not represent a binding composition and/or life expectancy assurance; these are simply experiential values with no warranty implications. These declared values also do not extend the expiration period for defect claims or affect it in any way.

Wiring Diagrams

